We Claim:

1.   A method for notifying a client of a change to data stored at a database, the method comprising:

receiving a subscription from the client, the subscription selecting a first subset of data from within a set of data;

generating a subscription plan for filtering the first subset from within the set of data;

receiving a query to be executed at the database, the query changing a second subset of data within the set of data;

generating a query plan for executing the query, the query plan for filtering the second subset from within the set of data;

matching the subscription to the query based on the set of data;

supplementing the query plan with the subscription plan;

executing the supplemented query plan whereby the query changes the second subset of data and the subscription filters the first subset of data from within the second subset of data to form a third subset of data;

determining whether the third subset of data is non-empty; and

if the third subset of data is non-empty, then generating a notification of the change to the third subset of data.

2.   The method of claim 1, further comprising terminating the subscription.

3.   The method of claim 1, further comprising persisting the subscription.

4.   The method of claim 1, further comprising storing the subscription plan at a notification manager.

5.   The method of claim 1, further comprising changing the second subset of data at the database.

6.   The method of claim 1, further comprising submitting the notification to the client.

7.   The method of claim 6, further comprising changing the third subset of data at the client.

8.   A computer readable medium having stored thereon computer readable instructions for performing the following steps:

receiving a subscription from a client, the subscription selecting a first subset of data from within a set of data stored at database;

generating a subscription plan for filtering the first subset from within the set of data;

receiving a query to be executed at the database, the query changing a second subset of data within the set of data;

generating a query plan for executing the query, the query plan for filtering the second subset from within the set of data;

matching the subscription to the query based on the set of data;

supplementing the query plan with the subscription plan;

executing the supplemented query plan whereby the query changes the second subset of data and the subscription filters the first subset of data from within the second subset of data to form a third subset of data;

determining whether the third subset of data is non-empty; and

if the third subset of data is non-empty, then generating a notification of the change to the third subset of data.

9.   The computer readable medium of claim 8, further comprising computer readable instructions for terminating the subscription.

10.   The computer readable medium of claim 8, further comprising computer readable instructions for persisting the subscription.

11.   The computer readable medium of claim 8, further comprising computer readable instructions for storing the subscription plan at a notification manager.

12.   The computer readable medium of claim 8, further comprising computer readable instructions for changing the second subset of data at the database.

13.   The computer readable medium of claim 8, further comprising computer readable instructions for submitting the notification to the client.

14.   The computer readable medium of claim 13, further comprising computer readable instructions for changing the third subset of data data at the client.

15.   A system for notifying a client of a change to data stored at a database, the system comprising:

the client comprising a cached version of data stored at the database;

the database for storing the data, the database comprising:

a database front end for:

receiving a subscription from the client, the subscription selecting a first subset of data from within a set of data;

generating a subscription plan for filtering the first subset from within the set of data;

receiving a query to be executed at the database, the query changing a second subset of data within the set of data; and

generating a query plan for executing the query, the query plan for filtering the second subset from within the set of data; and

a notification manager for:

matching the subscription to the query based on the set of data;

supplementing the query plan with the subscription plan;

executing the supplemented query plan whereby the query changes the second subset of data and the subscription filters the first subset of data from within the second subset of data to form a third subset of data;

determining whether the third subset of data is non-empty; and

if the third subset of data is non-empty, then generating a notification of the change to the third subset of data.

16.   The system of claim 15, wherein the subscription is terminated after the notification is generated.

17.   The system of claim 15, wherein the subscription is persisted after the notification is generated.

18.   The system of claim 15, wherein the notification manager is further for storing the subscription plan.

19.   The system of claim 15, wherein the database further comprises:

an optimizer for generating an execution plan for the query based on the query plan;

an execution engine executing the query; and

a storage processor for maintaining data in a storage medium.

20.   The system of claim 15, wherein the notification manager is further for submitting the notification to the client.